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REMARKS

In response to the above-noted PTO communication, a change to the status identifier of claim 8 has been made. No other changes have been made to the prior response, which is repeated in its entirety in this paper for the Examiner's convenience. However, to avoid confusion, no additional copies of the drawing changes submitted with the previous paper are enclosed. If further copies are needed, Examiner Blanco is invited to telephone the undersigned.

In the pending Office Action, Examiner Blanco has repeated and made final his previous election requirement, withdrawing from his further consideration claims 9-14, 31-34, 37 and 40. Those claims have been indicated above as being withdrawn by the examiner. Nonetheless, for at least the reasons given in the previous response to the election requirement, it is believed that all of the claim in this application should be considered together, and Examiner Blanco is respectfully requested to reconsider that requirement.

Examiner Blanco made objections to the drawings in this case. In the first objection, he suggested that part of claim 5 (namely "the second tapered portion tapering away from the second exterior surface toward the first exterior surface such that the second pin has a larger portion that is near the second exterior surface and a smaller portion that is near the first exterior surface") was not shown in the drawings. Respectfully, at least Figure 2 shows that subject matter, as is explained in at least paragraph 0030 of the application. In Figure 2, a second pin (e.g. pin 34) has a tapered portion tapering away from an exterior surface 22 and toward an exterior surface 20. Whereas pin 32 has a larger portion near surface 20 and a smaller portion near surface 22, pin 34 has a larger portion near surface 22 and a smaller portion near surface 20, as claim 5 recites. Consequently, at least Figure 2 adequately shows subject matter in claim 5, and this objection should be withdrawn.

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The second objection alleges that part of claim 7 (namely "the pin extends through the body from one exterior surface to another") was not shown in the drawings. Respectfully, under a proper interpretation of that claim language, the drawings of Figures 2 and 3 show that feature. Although it is believed unnecessary, a new drawing sheet with Figure 6 showing pins 32 and 34 breaching surfaces of an embodiment of device 10, so as to provide additional support in the drawings for the language of claim 7 recited above. Specification support for Figure 6 is found, among other places, at paragraph 0030, and thus no new matter has been entered. The withdrawal of this objection is respectfully requested.

The third drawing objection suggests that part of claims 8 and 30 (namely "the pin is embedded within the body, such that it is surrounded on all sides by the body") is not shown in the drawings. Respectfully, at least Figures 2 and 3 show that subject matter, as is explained in at least paragraph 0030 of the application. In both figures, the entirety of pins 16 and 18 are within device 10, including their respective ends 34 and 32, and thus the entire pins are surrounded by device 10. Because at least Figures 2 and 3 show an embodiment within the scope of claims 8 and 30, this objection should be withdrawn.

One other objection was made to language in claim 35. However, as noted further below, claim 35 is being cancelled without prejudice to reconsideration in this or a continuing application. Applicant does not concede the propriety of the objection, and requests its withdrawal as moot.

As to the remaining claims 1-8, 15-30, 35-36, 38-39 and 41-42, Examiner Blanco issued rejections of each under alleged non-statutory double patenting, anticipation over one or more references, and/or obviousness grounds. Applicant does not concede the correctness of these rejections or the characterizations in the Office Action of the cited references. In order to move

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this application more quickly to allowance, the amendments indicated above are being made. Reconsideration of this application as amended is respectfully requested.

Claim 3 has been amended solely to place it into independent form. Claim 3 was initially rejected as allegedly anticipated by the Boyd reference and obvious over the Shimp reference. Turning first to the Boyd reference, nothing therein shows or suggests a pin that stops short of the second surface, as recited in claim 3. The Office Action suggests that item 16 of Boyd constitutes a "pin," but it does not explain how that item 16 stops short of a second surface. Without that explanation, the Office Action does not make a proper *prima facie* case of anticipation. Moreover, there is no drawing, and no text has been found, indicating that item 16 stops short of an exterior surface. Indeed, the drawings of the Boyd reference show items 16 as extending all the way to exterior surfaces of items 12 and 14, and the Office Action acknowledges that the alleged pins' ends are "flush with the outer surfaces" of the implant in Figures 3-5 and 8. In Figure 2 of Boyd, item 16 has end portions 36 and 37 that appear to be at least as thick as items 12 and 14. The Office Action suggests that Figure 10 of Boyd shows a pin "embedded within the body," but a close look reveals that statement to be in error. Figure 10 of Boyd places lead line 142 (indicating a "cross-member") on an outside surface of item 166, and shows holes through the items 163, 165 and 167 that cannot be seen from the perspective of the drawing in dotted lines. That drawing shows item 142 extending all the way through to an outside portion of implant part 167. Because Boyd does not show the subject matter of claim 3, this ground for rejection should be withdrawn.

As to alleged obviousness over the Shimp reference by itself, the Office Action acknowledges that Shimp does not show a pin end that stops short of a second surface, as recited in claim 3. The Office Action bases its obviousness analysis on three criteria: (1) the subject

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matter is an "obvious matter of design choice" because Applicant did not state that it provides an advantage, (2) one of ordinary skill in this art would have expected the claimed subject matter to work equally well regardless of the positioning of the pin, and (3) the Applicant's own application identified several variations in pin position. Respectfully, however, the Office Action did not set forth any objective evidence to support the first two of those positions, and Applicant's own application is immaterial to an obviousness analysis, which focuses on the understanding of the hypothetical person of ordinary skill in the art and the state of the art at the time Applicant's invention was made. The Office Action also did not identify a motivation or reason to change Shimp into Applicant's claimed subject matter.

The only information of record suggesting that a pin stops short of a surface is the Applicant's disclosure. The Office Action has not alleged that Shimp includes any such suggestion or motivation to modify itself in that fashion, and none has been found in that reference. Respectfully, it appears that the obviousness analysis in this case takes its motivation to combine from Applicant's disclosure. That impermissible hindsight is even more evident from the Office Action's claim that variations in structure identified in the application somehow establish each structure's obviousness over the others. Indeed, advantages or functional differences need not be discussed in the specification in order to be argued in support of patentability. To require an applicant to include evidence and arguments in the specification as to whether a claimed feature is a matter of design choice "would be to require patent applicants to divine the rejections the PTO will proffer when patent applications are filed." In re Chu, 36 U.S.P.Q. 2d 1089 (Fed. Cir. 1995). It is axiomatic that a motivation to modify reference(s) that emanates from a reference must be evident, even if it is clear that reference(s) can be modified or combined, and even if it is claimed that subject matter is within the skill of the art. See MPEP RESPONSE TO NOTICE OF NON-COMPLIANT AMENDMENT

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2143.01. It is clear that the present application was used against itself, and equally clear that no suggestion of any desirability or motivation to change Shimp, as the Office Action proposes, would have been recognized in the reference by a person of ordinary skill in this art.

Having the pin stop short of an outer surface does away with any possibility of interfering with adjacent tissues, presenting a low profile. Leaving a space also provides a place for easy ingrowth of bone tissue into the implant. Thus, the claimed subject matter provides at least these advantages over the Shimp reference, providing additional evidence of non-obviousness.

Moreover, the approach taken in the Office Action appears to contradict the guidance in MPEP 2144.03: "It is never appropriate to rely solely on 'common knowledge' in the art without evidentiary support in the record, as the principal evidence upon which a rejection is based" (citing In re Zurko, 59 U.S.P.Q.2d 1693 (Fed. Cir. 2001)); PTO "cannot simply reach conclusions based on its own understanding or experience – or its own assessment of what would be basic knowledge or common sense. Rather, [they] must point to some concrete evidence in the record in support of these findings"). No particular evidence of what one of ordinary skill in the art would consider a matter of design choice, or of how such person would have expected Applicant's claimed subject matter to work, has been provided. If the analysis relies on the personal knowledge of the Examiner or on other information not of record, the Examiner is respectfully requested to provide a declaration as permitted by the MPEP.

Respectfully, without concrete evidence to support the rejection, and without a motivation to modify Shimp that comes from Shimp or somewhere other than the present application, a *prima facie* case of obviousness has not been made by the Office Action. The rejection of claim 3 should thus be withdrawn.

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Regarding claim 4, it is allowable due to its dependence from claim 3 and on its own merit. The Office Action's analysis does not address the subject matter of claim 4, which recites a pin that has a larger portion near a first exterior surface and a smaller portion near a second exterior surface. Specifically, the Office Action does not point out particularly where in the Shimp reference that subject matter might be disclosed. Without that explanation, the Office Action does not make a proper *prima facie* case of anticipation. Moreover, there is no drawing, and no text has been found, that states that Shimp's item 90 (or anything else that might be compared to a pin) has different sized portions near different exterior surfaces. Item 90 is disclosed as cylindrical (see figure 4), and similar items (see figures 17-21, 40-41) are likewise either uniform in diameter or symmetrical, so that the size near one exterior surface of a body is the same as the size near another exterior surface. Because the Office Action did not meet its burden to explain its anticipation position, and because Shimp does not show the subject matter of claim 4, this ground for rejection should be withdrawn.

Claim 8 has also been amended solely to place it into independent form. Like claim 3, claim 8 was initially rejected as allegedly anticipated by the Boyd reference and obvious over the Shimp reference. Turning first to the Boyd reference, nothing therein shows or suggests a wherein the pin is embedded within the body, such that it is surrounded on all sides by the body, as recited in claim 8. The Office Action suggests that item 16 of Boyd constitutes a "pin," but it does not explain how that item 16 is embedded or surrounded by a body. Without that explanation, the Office Action does not make a proper *prima facie* case of anticipation. As explained above with respect to claim 3, the Boyd reference shows its items 16 and 142 as extending to or over the end surfaces of their implants, and thus not surrounding the alleged pin on all sides. The "osteogenic material" shown in Boyd's Figure 10 is not designated as a part of

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its "implant assembly," and it cannot be considered any of the first and second body pieces as recited in claim 8. Because the Boyd reference does not show the subject matter of claim 8, this ground for rejection should be withdrawn.

As to alleged obviousness over the Shimp reference by itself, the Office Action does not discuss anything concerning a pin embedded within the body, such that it is surrounded on all sides by the body. It only acknowledges that Shimp does not show a pin end that stops short of a second surface. Respectfully, the Office Action has not explained at all how the Shimp reference can properly be modified into the subject matter of claim 8. On that basis alone, this rejection of claim 8 should be withdrawn.

Moreover, the remarks above concerning the obviousness rejection of claim 3 is equally pertinent with respect to claim 8. The bases for finding obviousness are not supported by objective evidence, and/or arise from Applicant's own application. Applying the reasoning given above to claim 8, it is evident that the obviousness rejection should be withdrawn from that claim as well.

Claim 20 has been amended solely to place it into independent form. Claims 20 and 28 were initially rejected as allegedly obvious over the Shimp reference in view of U.S. Patent No 6,494,883 to Ferree. The Office Action alleged that all of the subject matter was present in the two references, and that the motivation to combine them was "to help hold bone graft into position." The "struts" of the Ferree reference are oriented so that graft can be packed between them, and the struts thus operate as a cage to hold graft within them and within the perimeter of the Ferree implant. Further, Ferree identifies a goal of providing a suitable combination of metal pieces and bone pieces in an implant. Thus, Ferree's struts are designed and positioned for a wholly different purpose than those in both the Shimp reference and the present application. The

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pins in Shimp and the present application are for holding solid bone pieces, one to another, not for corralling potentially fluid or gelatinous graft material. While Ferree's struts are directed so as to operate as a cage or fence, the pins in Shimp operate as a lock, boss, or tongue of a tongue-and-groove mechanism. Because they are used in different ways for different functions, one of ordinary skill would not have understood that Ferree's struts or their orientation could be imported into the Shimp reference's device.

Further, the fact that Ferree suggests its struts' orientation to enable the containment of bone graft within a structure does not suggest to one of ordinary skill that that positioning can be used with the Shimp reference, at least because the Shimp device does not operate to contain bone graft, but is rather characterized itself as a graft. Thus, the motivation asserted from the Ferree reference does not find any use in the Shimp reference. In other words, even if one of ordinary skill understood from Ferree that its struts fenced in bone graft, he or she would not be motivated to change Shimp with that teaching because the Shimp device does not fence in anything, much less bone graft. Respectfully, the alleged combination of one aspect of the Ferree reference into the Shimp reference would not be obvious due to their divergent teachings and purposes.

Independent claim 30 recites a pin embedded within the body, such that it is surrounded on all sides by the body, similar to claim 8. For at least the reasons discussed above with respect to claim 8, this subject matter is not shown in the cited references, and the obviousness analysis in the Office Action does not present a proper case. Accordingly, the rejection of claim 30 should also be withdrawn.

The pending claims were also initially rejected under a provisional obviousness-type double patenting rejection. As the Office Action noted, the rejection was provisional insofar as
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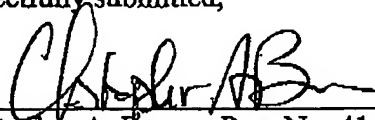
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the other application cited had not issued yet as a patent. Applicant will submit a terminal disclaimer to obviate this rejection, if it remains necessary, at an appropriate later time.

Further, in order to move this application more quickly to allowance claims 1, 2, 19, 25-27 and 35-42 have been cancelled without prejudice to reconsideration in this or a continuing application. No admissions are being made as to the patentability of any cancelled claim.

In conclusion, reconsideration of this application in view of the amendments and arguments made above is respectfully requested. The pending claims are believed to be in condition for allowance, and a Notice of Allowance is respectfully solicited.

Respectfully submitted,



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